SATYAM KUMAR

Nehru Nagar, Buxar, Near Dr Vinod Hospital, Buxar, Bihar, PIN 802101, India

Portfolio | satyamkumarcode@gmail.com | LinkedIn | GitHub

OBJECTIVE

Detail-oriented and analytical Computer Science and Engineering (B.Tech.) graduate with expertise in Python, SQL, Power BI, machine learning, computer vision, deep learning, and blockchain analytics. Proficient in developing interactive dashboards and intuitive reports, as well as extracting actionable insights from large datasets. Seeking to advance skills in data engineering, data science, AI, and machine learning through further studies.

EDUCATION

B.Tech in Computer Science and Engineering, Kalinga Institute of Industrial Technology (KIIT), Bhubaneswar, Odisha. **CGPA: 7.77/10**   **2022 – Jun, 2026 (expected)**

PROJECTS

1. **Prediction of Student Exam Performance, Kalinga Institute of Industrial Technology**
    Python, Scikit-Learn, Flask, Power BI(Individual)   **June 5th, 2025 – June 30th, 2025**
Summary: Created an end-to-end machine learning project to predict student maths scores using demographic and academic data. Identified significant performance determinants using EDA and feature engineering. Created and compared 7+ regression models (Random Forest, XGBoost, CatBoost, Linear Regression), optimising hyperparameters for a highest R^2 score of 0.88. Deployed the finished model as a Flask web app for real-time predictions. Developed interactive Power BI dashboards to analyse score distributions, group performance, and academic trends for actionable insights.

2. **Getting Handwritten Text Out Of Pictures, Kalinga Institute of Industrial Technology**
    Python, PyTorch, Transformers (Hugging Face), Streamlit, WandB   **Dec 2024-Mar 2025**
Team Size: 5   **Team Role:** Model Tester & Research Contributor
Summary: Working on TrOCR, a transformer-based OCR system that can read handwritten Hindi text. It is made up of a Vision Transformer and RoBERTa. Assisted in testing the model by looking at real-life handwriting samples that were made just for the test and deciding how good they were. Contributed to root cause analysis and implemented solutions, including multi-language support, real-time deployment enhancements, and NLP post-processing improvements. The model is about 96% accurate at the character level (CER ~3.7%) and was used to make predictions in real time through a Streamlit web interface.

3. **AutoExtract: A project for the Amazon ML Challenge 2024**
    Python, PyTorch, OpenCV, Machine Learning, Deep Learning   **13 Sep 2024 - 16 Sep 2024**
Team Size: 4   **Team Role: Project Lead & Solution Architect**
Summary: Built AutoExtract, a machine learning program that can automatically find out information about pictures, like their size, weight, and volume. Used deep learning models like ResNet50 and combined them with OCR methods to get the right values and make predictions. Improved model performance by optimising hyperparameters, expanding the dataset, and implementing early stopping techniques. Utilised post-processing validation to ensure consistent prediction accuracy. Enhanced tool effectiveness for e-commerce platforms by automating data entry, reducing errors, and accelerating business processes.

SKILLS & TECHNOLOGIES

Data analytics involves the use of SQL (MySQL, SQL Server), R (dplyr, ggplot2, tidyr), Excel (Power Query, PivotTables), and Power BI (DAX, RLS).
Programming: Python (Pandas, NumPy, Matplotlib, Seaborn, Scikit-learn), R (Statistical Computing, Data Manipulation), C, Git, Jupyter Notebook.
Machine Learning: Scikit-learn Pipelines, Regression, Classification, and Feature Engineering.

Deep Learning and Computer Vision: TensorFlow, Keras, PyTorch, OpenCV; Image Classification, and Object Detection.
Additional Tools: Google Workspace, MS Word, PowerPoint, AWS, HTML,Flask, and CSS
Soft Skills: Problem Solving, Communication, Critical Thinking, Data Storytelling, Time Management, Team Collaboration, and Stakeholder Engagement.

INTERNSHIPS
Data Analyst Intern, GeeksforGeeks, Noida, India Apr – Jul 2024
- Collaborated on SQL, Python, and Power BI projects that utilised real-time analytics. Gave information about e-commerce performance and growth trends.
- Used Power BI to make dashboards that show KPIs like sales trends, product returns, and customer behaviour.
- Utilised joins, window functions, and CTEs to make SQL queries efficient to obtain important business KPIs.
- Applied Power Query to automate data cleansing in Excel, resulting in a 30% faster reporting process.

Financial Analyst (Part-time), Kraya & Kuber Society, Feb – Aug 2023
- Used Excel to handle budgeting, forecasting cash flow, and monthly financial reports.
- Prepared extensive reports to assist with decisions about how to spend money and its allocation.
- Used scenario analysis and model projections to assist with financial planning.

CERTIFICATIONS

- Deep Learning Specialisation, HackerRank Link   **2025**
- Machine Learning Specialization, Coursera Link   **2025**
- Mathematics for Machine Learning and Data Science Specialisation, Unstop Link   **2025**
- Certificate of Accomplishment SQL (Advanced), HackerRank Link   **2025**
- Complete Data Analytics Program, GeeksforGeeks, Link   **2024**
- Data Analysis with Python & Pandas, Maven Analytics, Link   **2024**
- Data Visualization with Matplotlib & Seaborn, Maven Analytics, Link   **2024**

ACHIEVEMENTS
- Smart India Hackathon 2024 – National Level Selection
- Amazon ML Challenge 2024 – Ranked 966 out of 75,000 participants

CO-CURRICULAR ACTIVITIES
- Investment Portfolio Management & Option Trading – Personal Activities **Mar 2019 – Present**
- Federation of Entrepreneurship Development (FED) – KIIT TBI   **Jul 2023 – Jan 2025**

LEADERSHIP ROLES
- Founder – FinTech Learning Initiative, KIIT   **Aug 2023 – Present**
- Research Lead – OCR Development Project   **Dec 2024–Mar 2025**
- Project Lead & Solution Architect – Smart India Hackathon 2024   **Sep 2024 – Oct 2024**
- Class Representative – B.Tech CSE, KIIT   **JUL 2023 – NOV 2023**

COMMUNITY INVOLVEMENT
- Youth Red Cross, KIIT.   **Aug 2023 – Present**
- Global Tribal Fest 2025 at Ramadevi Women's University in Bhubaneswar. **January 2025**

LANGUAGES KNOWN
English (Proficient), Hindi (Native), and Bhojpuri (Fluent).